

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

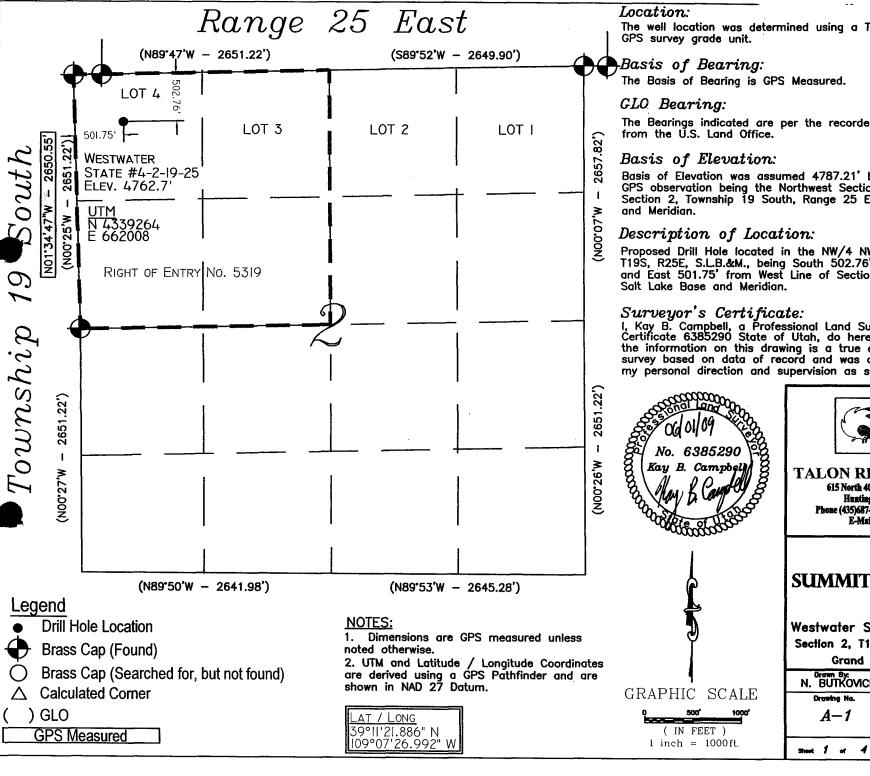
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|   |    |      |  |
|   |    |      |  |

AMENDED REPORT

|   |                         |                             |                           |                    |   |                    | (highlig                             | ght changes)         |  |
|---|-------------------------|-----------------------------|---------------------------|--------------------|---|--------------------|--------------------------------------|----------------------|--|
| ·   |                         | APPLICAT                    | ION FOR                   | PERMIT TO          | DRILL   | 1                  | NERAL LEASE NO:<br>-49255            | 6. SURFACE:<br>State |  |
| 1A, TYPE OF V   | VORK <sup>,</sup>       | DRILL 🗸                     | REENTER [                 | DEEPEN             |   |                    | NDIAN, ALLOTTEE OF                   | R TRIBE NAME:        |  |
| B. TYPE OF W  |                         | _                           | WO<br>OTHER <u>Inject</u> | (-<br>ion SIN      | GLE ZONE MULTIPLE ZON   | IE 1. <b>/ I I</b> | IT or CA AGREEMENT                   | NAME:                |  |
|   |                         | J GAS LJ (                  | 5111CIN <u>101000</u>     | OIIV               |   | N//                | <u> </u>                             |                      |  |
| 2. NAME OF OF Summit O  | PERATOR:<br>Perating, L | LC                          |                           |                    |   | 1                  | ELL NAME and NUMBE<br>Estwater State |                      |  |
| 3. ADDRESS OF   |                         | 100 Doule C                 | 14.                       | UT OA              | PHONE NUMBER:   | 1 /                | ELD AND POOL, OR \                   | 44 - 25 - 25-        |  |
|   | PECTOR AVE              | 102 <sub>CITY</sub> Park C  |                           | UT ZIP 84          |   |                    | areoten Cisc<br>TRIQTR, SECTION, TO  | δ                    |  |
|   |                         | (4)                         | 62013X<br>13392664        |                    |   | M                  | ERIDIAN:                             |                      |  |
|   |                         | ZONE: 503' FNL              | , .                       | •                  | 109, 124104   | NN                 | /NW 2 19                             | 9S 25E S             |  |
| 14. DISTANÇE II   | N MILES AND DI          | RECTION FROM NEAF           | REST TOWN OR PO           | ST OFFICE:         |   | 12. C              | OUNTY:                               | 13. STATE:           |  |
| 1.2 miles   | North and               | East of Harle               | y Dome                    |                    |   | Gr                 | and                                  | UTAH                 |  |
|   | O NEAREST PRO           | OPERTY OR LEASE L           | NE (FEET)                 | 16. NUMBER O       | F ACRES IN LEASE:   | 17. NUMBER         | OF ACRES ASSIGNE                     |                      |  |
| 502'  |                         |                             |                           |                    | 160   |                    |                                      | 40                   |  |
| 18. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR APPLIED FOR) ON THIS LEASE (FEET) |                         |                             | 19. PROPOSED              |                    | 20. BOND DI   |                    |                                      |                      |  |
| See attached map  21. ELEVATIONS (SHOW WHETHER DF, RT, GR, ETC.):  22                   |                         |                             |                           | 22 APPROXIM        | 1,725   | N 23-1             | D DURATION:                          |                      |  |
| · •   |                         |                             |                           | 7/1/2009           |   |                    |                                      |                      |  |
| 24.   |                         |                             | PROPOS                    | ED CASING A        | ND CEMENTING PROGRAM  |                    |                                      |                      |  |
| SIZE OF HOLE  | CASING SIZE             | E, GRADE, AND WEIG          | HT PER FOOT               | SETTING DEPTH      | CEMENT TYPE, QU   | ANTITY, YIELD,     | AND SLURRY WEIGH                     | रा                   |  |
| 12-1/4"   | 9-5/8"                  | H-40                        | 32.3#                     | 170                | NEAT Class A Slurry   | 90 Sack            | s 1.18 cu ft/s                       | sk 15.6 ppg          |  |
| 8-5/8'  | 7"                      | J-55 LT& <b>⊆</b>           | 23.0#                     | 1,725              | 50/50 Pozmix  | 141 Sack           | s 1.40 cu ft/s                       | sk 13.6 ppg          |  |
|   |                         |                             |                           |                    |   |                    |                                      |                      |  |
|   |                         |                             |                           |                    |   |                    |                                      |                      |  |
|   |                         |                             |                           |                    | ·   |                    |                                      |                      |  |
|   |                         |                             |                           |                    |   |                    |                                      |                      |  |
|   |                         |                             |                           |                    |   |                    |                                      |                      |  |
| 25.   |                         |                             |                           | ATTA               | CHMENTS   |                    |                                      |                      |  |
| VERIFY THE FOL  | LOWING ARE A            | TTACHED IN ACCORD           | DANCE WITH THE U          | ITAH OIL AND GAS C | ONSERVATION GENERAL RULES:  |                    |                                      |                      |  |
| WELL PL   | AT OR MAP PRE           | PARED BY LICENSE            | SURVEYOR OR F             | NGINEER            | Z COMPLETE DRILLING PLAN  |                    |                                      |                      |  |
|   |                         | OF WATER RIGHTS A           |                           |                    | FORM 5, IF OPERATOR IS PERSON OR COMPANY OTHER THAN THE LEASE OWNER |                    |                                      |                      |  |
|   |                         | JE WATER RIGHTS A           |                           | E OF WATER         | FORM 5, IF OPERATOR IS FE   | ROON OR COM        | PANT OTHER THAN                      | THE LEASE OWNER      |  |
|   |                         | ^                           | \ /                       |                    |   |                    |                                      |                      |  |
| NAME (PLEASE F  | David                   | Knudser                     | 1//                       |                    | TITLE Summit Opera  | ating, LLC         |                                      |                      |  |
| SIGNATURE   | l_                      |                             | Vent !                    |                    | DATE  |                    |                                      |                      |  |
| nis space for Stat  | te use only)            | $\mathcal{F} = \nabla_{ij}$ |                           | App<br>Lital       | h Division of   |                    |                                      |                      |  |
|   |                         | <b>V</b>                    |                           |                    | as and Mining   |                    |                                      |                      |  |
|   | . i                     | ion and an                  | 0.0                       | •                  | •   |                    | RECE                                 | <b>IVED</b>          |  |
| API NUMBER ASS  | GIGNED:4                | 3-019-316                   | 25                        | Date: O            | RAPPROVAL COGA  |                    | HIN O                                | ) 2000               |  |
|   |                         |                             |                           | naid:              | 9-02-1871   |                    | JUN 0 8                              | <i>3</i> 2009        |  |

(11/2001)

DIV. OF OIL, GAS & MINING



The well location was determined using a Trimble 5700

The Bearings indicated are per the recorded plat obtained

Basis of Elevation was assumed 4787.21' based off of a GPS observation being the Northwest Section Corner of Section 2, Township 19 South, Range 25 East, Salt Lake Base

Proposed Drill Hole located in the NW/4 NW/4 of Section 2. T19S, R25E, S.L.B.&M., being South 502.76' from North Line and East 501.75' from West Line of Section 2, T19S, R25E,

I, Kay B. Campbell, a Professional Land Surveyor, holding Certificate 6385290 State of Utah, do hereby certify that the information on this drawing is a true and accurate survey based on data of record and was conducted under my personal direction and supervision as shown hereon.



#### TALON RESOURCES, INC.

615 North 400 East P.O. Box 1230 Huntington, Utah 84528 Phone (435)687-5310 Fax (435)687-5311 E-Mail talonoety.net

### SUMMIT OPERATING

Westwater State #4-2-19-25 Section 2, T19S, R25E, S.L.B.&M.

Grand County, Utah

| N. BÜTKOVICH     | L.W.J./K.B.C.    |  |  |  |  |
|------------------|------------------|--|--|--|--|
| Drawing No.  A-1 | Date:<br>4/29/09 |  |  |  |  |
| A-1              | 1" = 1000'       |  |  |  |  |
| Shoot 1 of 4     | Job No.<br>4185  |  |  |  |  |

#### **DRILLING PROGRAM**

Attached to UDOGM Form 3 Summit Operating, LLC **Westwater State 4-2-19-25** NW/4 NW/4, Lot 4, Sec. 2, T19S, R25E, SLB & M 503' FNL, 502' FWL Grand County, Utah

#### 1. The Geologic Surface Formation

Tununk Member Mancos Shale

#### 2. Estimated Tops of Important Geologic Markers

| KB                           | Ground + 10' |
|------------------------------|--------------|
| ✓ Dakota Sandstone           | 35'          |
| Cedar Mountain Formation     | 115'         |
| Brushy Basin Member Morrison | 180'         |
| ✓ Salt Wash Member Morrison  | 600'         |
| Tidwell Member Morrison      | 817'         |
| Summerville Formation        | 852'         |
| ∠ Slick Rock Member Entrada  | 897'         |
| √ Kayenta Formation          | 1145'        |
| Wingate Sandstone     ✓      | 1353'        |
| Chinle Formation             | 1687'        |
| TD Chinle Formation          | 1735'        |
|                              |              |

#### 3. Projected Gas & Water Zones

No Groundwater is anticipated to be encountered. Water encountered will be reported on a Form 7 "Report of Water Encountered During Drilling".

Casing & cementing will be done to protect potentially productive hydrocarbons, lost circulation zones, abnormal pressure zones, and prospectively valuable mineral deposits. All indications of usable water will be reported.

Surface casing will be tested to 1000 psi for 10 minutes. Pressure drop is not to exceed 150 psi.

#### 4. The Proposed Casing and Cementing Programs

#### **Casing Program**

| HOLE    | SETTING DEPTH | SIZE   | WEIGHT,GRADE  | CONDITION |
|---------|---------------|--------|---------------|-----------|
| SIZE    | (INTERVAL)    | (OD)   | & JOINT       |           |
| 12-1/4" | 170'          | 9-5/8" | 32.3# H-40    | New       |
| 8-5/8   | 1,725'        | 7"     | 23# J-55 LT&C | New       |

#### **Cement Program**

Only the surface casing will be cemented aback to surface.

Surface Casing:

90 sacks NEAT Class A Slurry

Weight: 15.6 # / gal Yield: 1.18 cu.ft / sk

Production Casing:

141 sacks Class H 50-50 Pozmix W/2% Bentonite &

Pounds/sk Gilsonite Weight: 13.6 # / gal Yield: 1.40 cu.ft / sk

The following shall be entered in the driller's log:

- 1) Blowout preventer pressure tests, including test pressures and results;
- 2) Blowout preventer tests for proper functioning;
- 3) Blowout prevention drills conducted;
- 4) Casing run, including size, grade, weight, and depth set;
- 5) How the pipe was cemented, including amount of cement, type, whether cement circulated, location of the cementing tools, etc.;
- 6) Waiting on cement time for each casing string;
- 7) Casing pressure tests after cementing, including test pressures and results.

#### 5. The Operator's Minimum Specifications for Pressure Control

See the "BOPE schematic diagram" for the blowout preventer equipment. An 11" 3,000 psi double-ram BOPE equipment with a rotaqting head. No annular preventer will be needed. The BOP will be tested and charted using a BOP tester and test plug to 3,000 psi for 10 minutes. All text will be recorded in the Driller's log book. Physical operation of the BOP will be checked on each trip.

#### 6. The Type and Characteristics of the Proposed Circulating Muds

Surface hole will be drilled with air/mist/foam Long string hole will be drilled with air/mist/foam until conditions require circulation with gel/chem. mud

#### 7. The Testing, Logging and Coring Programs are as followed

Testing -

DST's are not planned

Logging –

End of Surface casing - TD Gamma Ray, Density-Neutron Porosity, Induction, Caliper

Coring --

No coring is planned for this location

#### Any Anticipated Abnormal Pressures or Temperatures

No abnormal pressures or temperatures have been noted or reported in wells drilled in The area nor at the depths anticipated in this well. Bottom hole pressure expected is 700 psi max. No hydrogen sulfide or other hazardous gases or fluids have been found, reported or are known to exist at these depths in the area.

#### 8. <u>Anticipated Starting Date and Duration of the Operations.</u>

The well will be drilled approx.: July 1, 2009

Verbal and/or written notifications listed below shall be submitted in accordance with instructions from the Division of Oil, Gas & Mining:

(a) prior to beginning construction;

- (b) prior to spudding;
- (c) prior to running any casing or BOP tests;
- (d) prior to plugging the well, for verbal plugging instructions.

Spills, blowouts, fires, leaks, accidents or other unusual occurrences shall be reported to the Division of Oil, Gas & Mining immediately.

#### Multipoint Surface Use Plan

Attached to UDOGM Form 3 Summit Operating, LLC **Westwater State 4-2-19-25** NW/4 NW/4, Lot 4, Sec. 2, T19S, R25E, SLB & M 503' FNL, 502' FWL Grand County, Utah

#### 1. Existing Roads

- a. The proposed access road will be Constructed consistent with the State of Utah and Summit Operating, LLC, and will encroach on Grand County Road 193. County Road 193 is the main access into this area.
- b. Existing roads will be maintained in the same or better condition.

#### 2. Planned Access

Approximately 400' of new access will be required. Access is determined by acquired Right of way by the surface owner.

- a. Maximum Width: 24'
- b. Maximum grade: 10 %
- c. Turnouts: None
- d. Drainage design: 1 18" culvert" may be required along the new portion of the road. Water will be diverted around the road as necessary and practical.
- e. When the well is completed for injection, the road will be upgraded with a gravel surface and maintained as necessary to prevent soil erosion and accommodate year-round traffic.
- f. Existing trees will be left in place where practical to provide screening and buffer areas.

#### 3. Location of Existing Wells

a. See Drawing L-1. There is existing well locations within a one mile radius of the proposed location.

#### 4. Location of Existing and/or Proposed Facilities

- a. When the well is completed as an injection well, water storage, oil separation, and pumping facilities will be constructed to support injection activities.
- b. All surface area of the pad will be utilized for Injection facilities and equipment. Rehabilitation of any areas not used will be made in accordance with landowner stipulations.

#### 5. Location and Type of Water Supply

- a. Water to be used for drilling will be obtained from a commercial irrigation company, Ute Water Conservancy District, from their tap in Mack, Colorado or a municipal source in Fruita, CO. and trucked to the site.
- b. Water will be transported by truck over approved access roads.
- c. No water well is to be drilled for this location.

#### 6. Source of Construction Materials

- a. Any necessary construction materials needed will be obtained locally from a private source and hauled to the location on existing roads.
- b. No construction or surfacing materials will be taken from Federal/Indian land.

#### 7. Methods for handling waste disposal

a. A reserve pit will be constructed with a minimum of one-half the total depth below the original ground surface on the lowest point within the pit. The pit will be lined with a synthetic liner. Three sides of the reserve pit will be fenced within 24 hours after completion of construction and the fourth side within 24 hours after drilling operations cease with four strands of barbed wire, or woven wire topped with barbed wire to a height of not less than four feet. The fence will be kept in good repair while the pit is drying.

- b. Following drilling, the liquid waste will be evaporated from the pit and the pit backfilled and returned to natural grade. No liquid hydrocarbons will be discharged to the reserve pit or location.
- c. In the event fluids are produced, any oil will be retained in tanks until sold and any water produced will be retained until its quality can be determined. The quality and quantity of the water will determine the method of disposal.
- d. Trash will be contained in a portable metal container and will be hauled from location periodically and disposed of at an approved disposal site. Chemical toilets will be placed on location and sewage will be disposed of at an appropriate disposal site.

#### 8. Ancillary Facilities

a. We anticipate no need for ancillary facilities with the exception of trailers to be located on the drill site.

#### 9. Well-site Layout

- a. Available topsoil will be removed and stockpiled as reflected on Drawing A-2. Any excess subsoil will also be stockpiled as reflected on Drawing A-2. Location of the rig, reserve and blooie pits, and drilling support equipment will be located as shown on "Rig and Equipment Layout" drawing.
- b. A blooie pit will be located in the southeast corner of the pad and 100' from the drill hole. A line will be placed on the surface from the center hole to the blooie pit. The blooie pit will not be lined, but will be initially fenced on three sides to protect livestock/wildlife.
- c. Access to the well pad will be as shown on Drawing L-1.
- d. Natural runoff will be diverted around the well pad.

#### 10. Plans for Restoration of Surface

- a. All surface areas not required for injection operations will be graded to as near original condition as possible and contoured to maintain possible erosion to a minimum.
- b. Available topsoil will be stockpiled and will be evenly distributed over the disturbed areas and the area will be reseeded as prescribed by the landowner.
- c. Pits and any other area that would present a hazard to wildlife or livestock will be fenced off when the rig is released and removed.

- d. Any oil accumulation on the pit will be removed or overhead flagged as dictated by then existed conditions.
- e. Injection facility construction will commence following the completion of the well. If the well-site is to be abandoned, all disturbed areas will be recontoured to the natural contour as is possible.

#### 11. Surface Ownership

a. The well-site and access road will be constructed on lands owned by the School and Institutional Trust Lands Administration, 675 East 500 South, Salt Lake City, Utah 84102-2818; 801-538-5100. The operator shall contact the landowner and the Division of Oil, Gas and Mining 48 hours prior to beginning construction activities.

#### 12. Other Information:

- a. The primary surface use is wildlife habitat and grazing. The nearest dwelling is approximately 1.2 miles southwest. Nearest live water is in Bitter Creek, 1.8 miles South and East.
- b. If there is snow on the ground when construction begins, it will be removed before the soil is disturbed, and piled downhill from the topsoil stockpile location.
- c. The back-slope and fore-slope will be constructed no steeper than 3:1.
- d. All equipment and vehicles will be confined to the access road and well pad.
- e. A complete copy of the approved Application for Permit to Drill (APD) including conditions and stipulations shall be on the well-site during construction and drilling operations.

There will be no deviation from the proposed drilling and/or workover program without prior approval from the Division of Oil, Gas & Mining.

#### 13. Company Representative

David Knudson Summit Operating, LLC. 1441 Ute Blvd Suite 280 Park City, Utah 84098 1-435-940-9001

#### **Permitting Consultant**

Larry W. Johnson Talon Resources, Inc. 195 North 100 West Huntington, UT. 84528 1-435-687-5310

#### Mail Approved A.P.D. To:

Company Representative

#### **Excavation Contractor**

High Desert Excavating P.O. Box 75 Green River, Utah 84525 1-435-820-0288

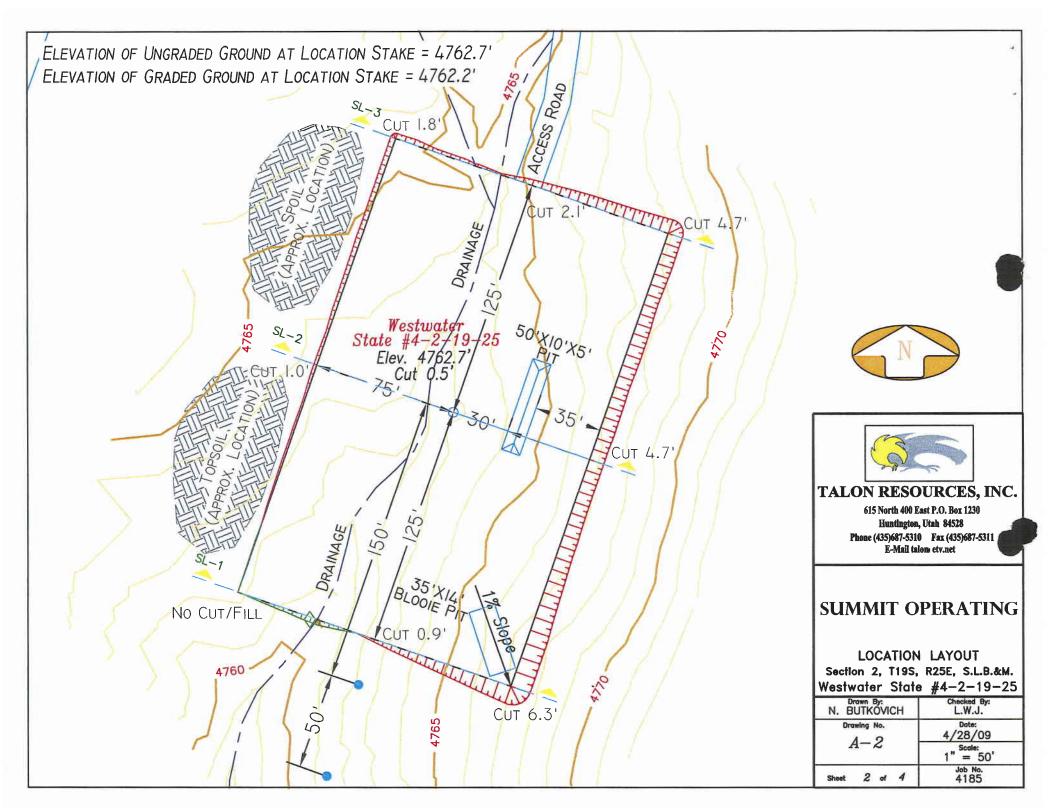
#### 14. Certification

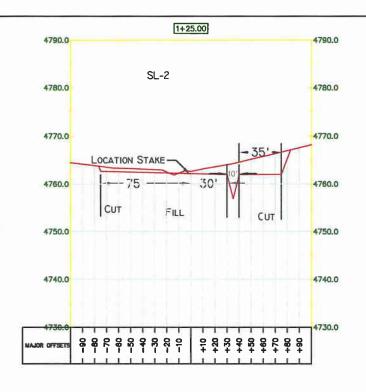
I hereby certify that I, or persons under my direct supervision have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct, and that the work associated with the operations proposed herein will be performed by Summit Operating, LLC. and its subcontractors in conformity with this plan and the terms and conditions under which it is approved.

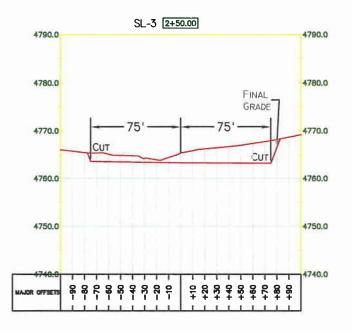
6-3-09

Date

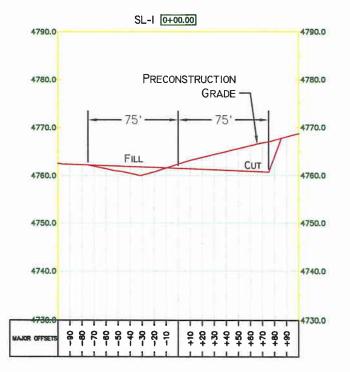
Larry W. Johnson







X-Section Scale 1"=40'



SLOPE = | 1/2 : | (EXCEPT PIT) PIT SLOPE = | : |



## TALON RESOURCES, INC 615 North 400 East P.O. Box 1230

Huntington, Utah 84528 Phone (435)687-5310 Fax (435)687-5311 E-Mail talom etv.net

#### **SUMMIT OPERATING**

TYPICAL CROSS SECTION
Section 2, T19S, R25E, S.L.B.&M.
Westwater State #4-2-19-25

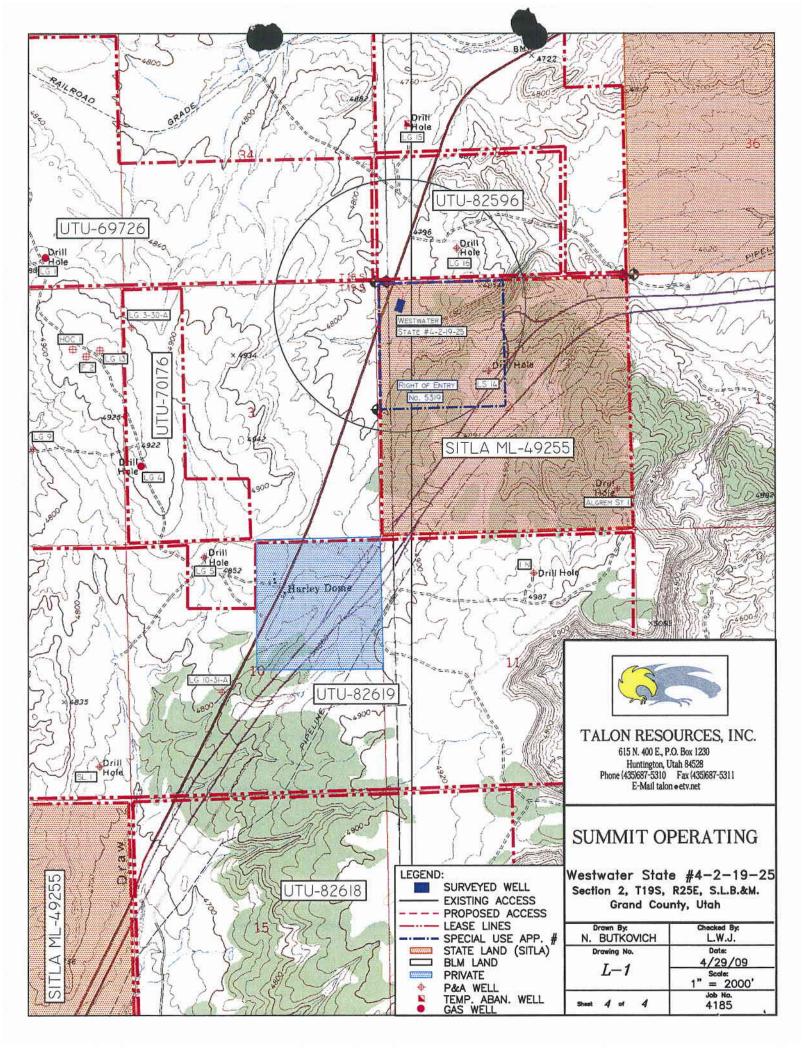
| Drawn By:<br>N. BUTKOVICH | Checked By:<br>L.W.J. |
|---------------------------|-----------------------|
| Drawing No.               | Date:<br>4/28/09      |
| C-1                       | 1" = 80'              |
| Sheet 3 of 4              | Job No.<br>4185       |

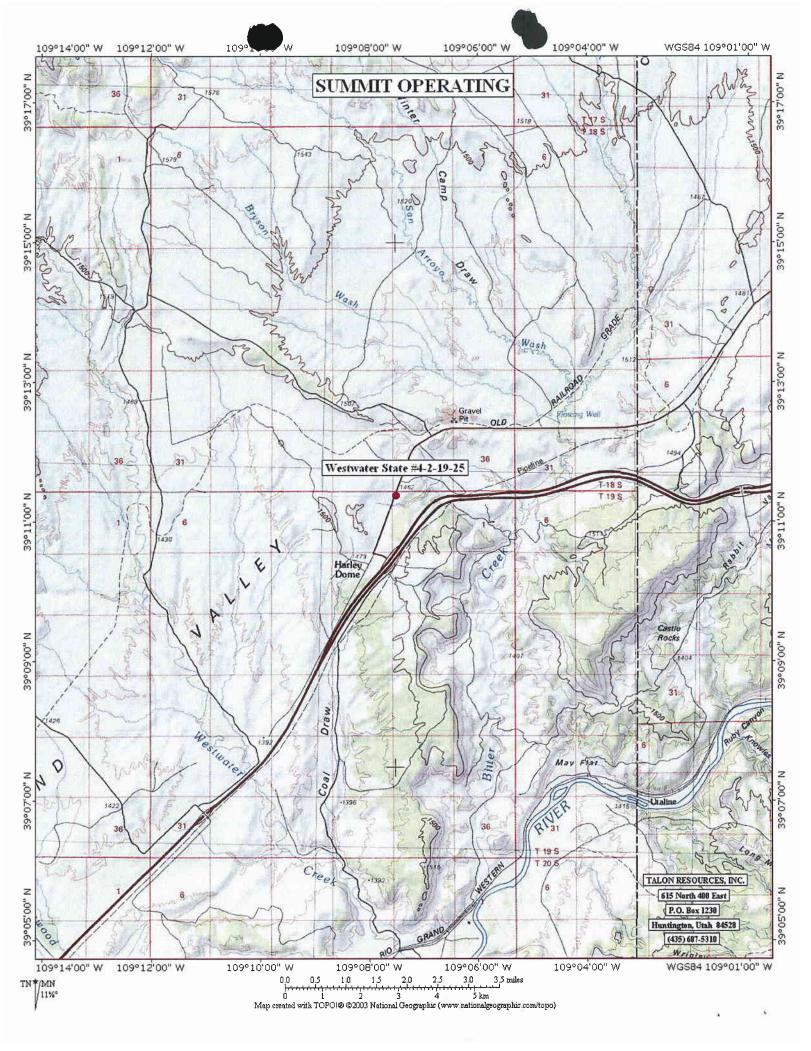
#### APPROXIMATE YARDAGES

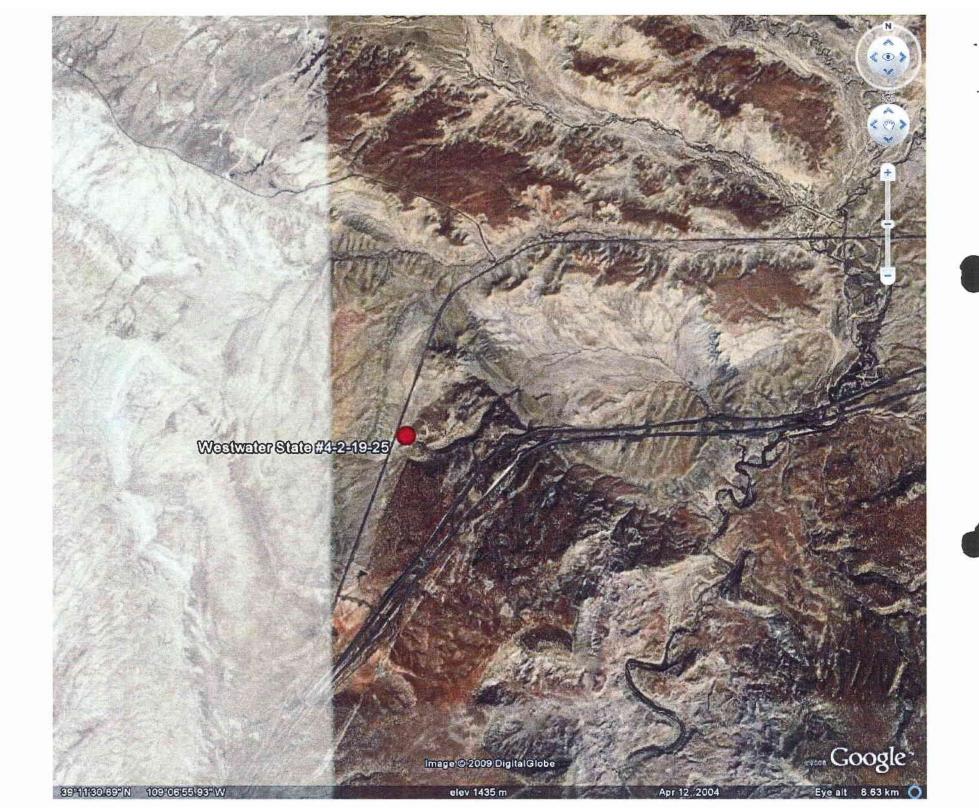
(6")TOPSOIL STRIPPING = 765 CU. YDS.

TOTAL CUT (INCLUDING PIT) = 2,865 CU. YDS.

TOTAL FILL = I20 CU. YDS.

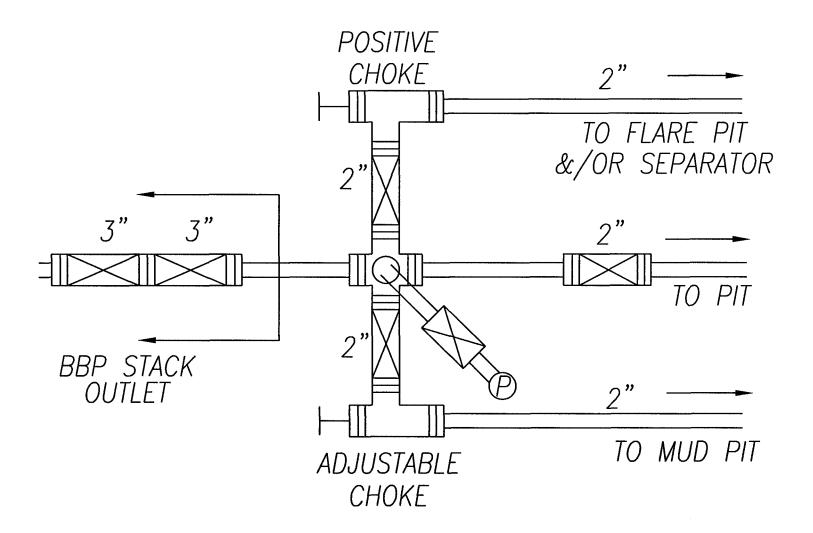








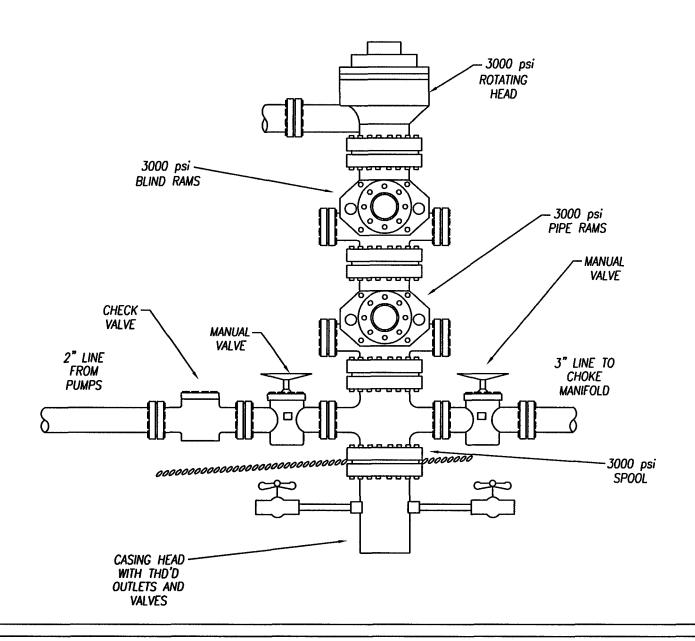
## CHOKE MANIFOLD



Choke Schematic Diagram

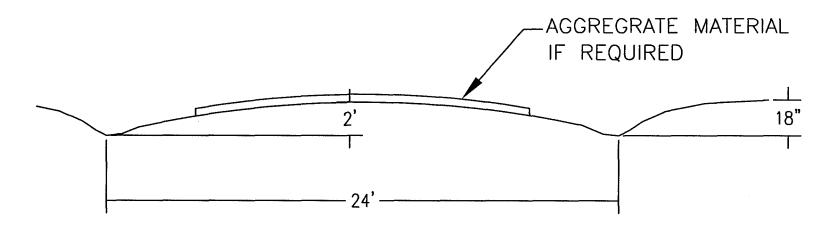
Summit Operating

# BOP Equipment 3000psi WP

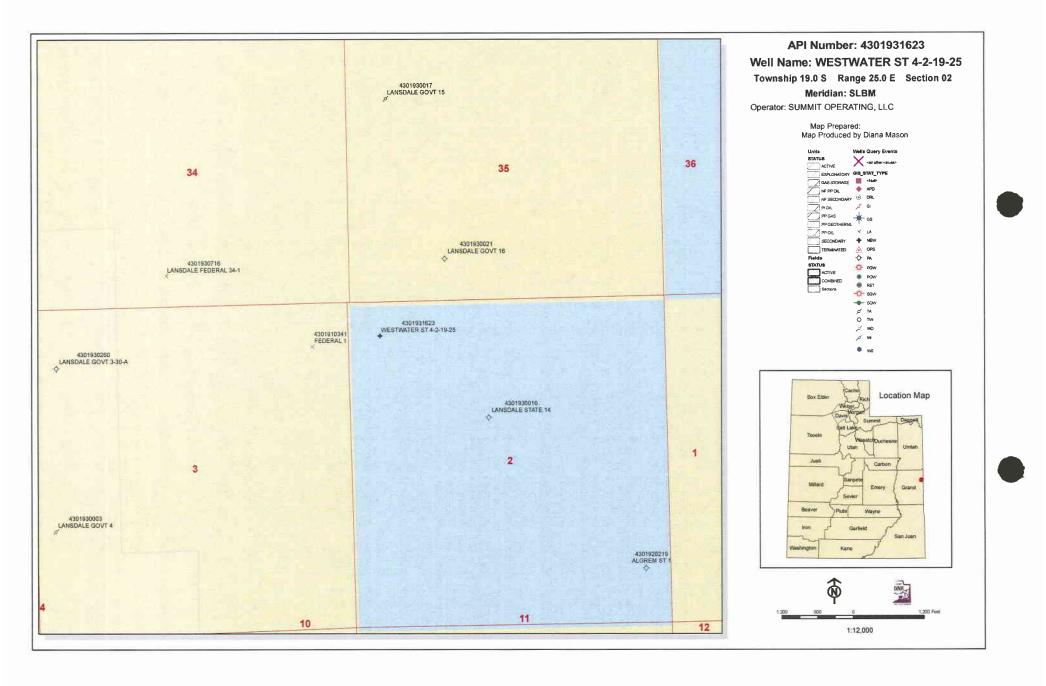


BOPE Schematic Diagram

## TYPICAL ROAD CROSS-SECTION



| API NO. ASSI                          | API NO. ASSIGNED: 43-019-31623  |   |  |  |  |  |
|---------------------------------------|---|---|--|--|--|--|
|                                       |   |   |  |  |  |  |
| PHONE NUMBER:                         | 435-940-900   | 01  |  |  |  |  |
|                                       |   |   |  |  |  |  |
| INSPECT LOCATE                        | N BY: /   | /   |  |  |  |  |
| Tech Review                           | Initials  | Date  |  |  |  |  |
| Engineering                           | DKO   | 7/16/09   |  |  |  |  |
| Geology                               |   | 7,7,7   |  |  |  |  |
| Surface                               |   |   |  |  |  |  |
| PROPOSED FORMA                        |   | IN  |  |  |  |  |
| LOCATION AND SITING:                  |   |   |  |  |  |  |
| R649-2-3                              |   |   |  |  |  |  |
| Unit:                                 |   |   |  |  |  |  |
|                                       |   |   |  |  |  |  |
| · · · · · · · · · · · · · · · · · · · |   |   |  |  |  |  |
|                                       |   |   |  |  |  |  |
|                                       | : 105.161   | (a)   |  |  |  |  |
| Eff Date:                             | 11-15-197   |   |  |  |  |  |
| Siting: 500' Sx 400' Sx               | property lease  | tin 4 200 for 14 14 unes  |  |  |  |  |
| R649-3-11. Dire                       | ectional Dri  | 11  |  |  |  |  |
| usite (06-16-09)                      |   |   |  |  |  |  |
| FIUT OF BASIS<br>#4 (95/8" and 7      | ···   |   |  |  |  |  |
|                                       | PHONE NUMBER:  INSPECT LOCATN  Tech Review  Engineering  Geology  Surface  PROPOSED FORMA  COALBED METHAN  LOCATION AND SITING:  R649-2-3.  Unit:  R649-3-2. General Siting: 460 From Q R649-3-3. Except  Drilling Unit  Board Cause No Eff Date: Siting: 500'Sx  400'N R649-3-11. Direct | PHONE NUMBER: 435-940-900  INSPECT LOCATN BY: /  Tech Review Initials  Engineering OCO  Geology  Surface  PROPOSED FORMATION: CHI COALBED METHANE WELL? NO  LOCATION AND SITING:  R649-2-3.  Unit:  R649-3-2. General Siting: 460 From Qtr/Qtr & 920'  R649-3-3. Exception  Drilling Unit  Board Cause No: 102.166 Eff Date: 11-15-197 Siting: 500' Congart Lase 400' W DW 71320' FC R649-3-11. Directional Dri |  |  |  |  |



## **Application for Permit to Drill**

### Statement of Basis

Utah Division of Oil, Gas and Mining 7/16/2009

Page 1

APD No API WellNo Status Well Type **Surf Ownr CBM** WD S No

1627 43-019-31623-00-00 SUMMIT OPERATING, LLC Surface Owner-APD Operator

Well Name WESTWATER ST 4-2-19-25 Unit

Field UNDESIGNATED Type of Work

503 FNL 502 FWL GPS Coord (UTM) 662013E 4339266N Location NWNW 2 19S 25E S

#### **Geologic Statement of Basis**

Significant volumes of high quality ground water are likely to be encountered in the bedrock at this location. A poorly permeable soil is likely to be developed on the thin cover of Lower Shale Member of the Mancos Shale that likely overlies the Cretaceous age Dakota Sandstone. Good quality water is likely to be encountered in permeable Mesozoic sandstones found below the Mancos Shale. The well is likely to penetrate as many as four locally recognized aquifers. The proposed casing and cementing program and benign mud system should adequately isolate any zones of fresh water that may be penetrated. No underground water rights have been filed on any area within a mile of the proposed well site.

Chris Kierst 7/8/2009 **APD** Evaluator Date / Time

#### **Surface Statement of Basis**

Pre-site evaluation completed June 16, 2009. In attendance: Bart Kettle-DOGM, Ed Bonner-SITLA, David Knudson-Summit Energy, LLC, Red Rash-Summit Energy, LLC. Invited and choosing not to attend: Chris Wood-DWR, Mark Wright-Grand County.

As proposed the well pad contains a epermeral drainage running the full length of the well pad at roughly the center. Drainage shall be deverted to the north of the well pad at the intersection with the access road. Diverstion point, culvert outlet and discharge shall be rip rapped with 6" or greater stone to prevent eclerated errosinon.

Reserve pit is being permitted as 50' long x 10' wide x 5' deep. Pit shall be properly lined with a 12 mil liner. Reserve pit shall not be used for the storage of produced fluids or outside E&P waste. Consistent with the Utah Oil and Gas Conservation General Rules R649-3 the reserve pit shall be reclaimed within one year following drilling of the well bore.

Grand County requires road encroachment permit for County Rd 193, and compliance with land use code.

Bart Kettle 6/16/2009 **Onsite Evaluator** Date / Time

#### Conditions of Approval / Application for Permit to Drill

| Category | Condition   |
|----------|---|
| Pits     | A synthetic liner with a minimum thickness of 12 mils shall be properly installed and |
|          | maintained in the reserve pit.  |
| Surface  | The reserve pit shall be fenced upon completion of drilling operations.               |
| Surface  | Drainages adjacent to the proposed pad shall be diverted around the location.         |

#### Utah Division of Oil, Gas and Mining

**Operator** 

SUMMIT OPERATING, LLC

Well Name

WESTWATER ST 4-2-19-25

API Number

43-019-31623-0

**APD No.** 1627

**Tw** 19S

Field/Unit UNDESIGNATED

Location: 1/4,1/4 NWNW

Sec 2

Rng 25E

503 FNL 502 FWL

GPS Coord (UTM)

**Surface Owner** 

#### **Participants**

Bart Kettle-DOGM, Ed Bonner-SITLA, David Knudson-Summit Energy, LLC, Red Rash-Summit Energy, LLC. Invited and choosing not to attend: Chris Wood-DWR, Mark Wright-Grand County.

#### Regional/Local Setting & Topography

Proposed project site is located at the former Harley Dome site, in Grand County Utah. Annual precipitation is 8-10", vegetation is sparse at the project site, but would be described as salt scrub and Wyoming sage rangelands. Topography immediately adjacent to the project site is gently rolling clay flats. Drainage is to the southeast entering the Colorado River within 5 miles. No perennial water was observed in close proximity to the proposed project site. Drainages in the immediate area are ephemeral in nature, being dry throughout a majority of the year. On a regional setting the project is located in the Cisco Desert on the toe of the Uncompadgree up lift, a region known for it's harsh growing conditions due to low precipitation, and poorly developed salty soils. I-70, Rabbit Valley rest area, and Union Pacific train tracks are all located in close proximity to the proposed project.

#### Surface Use Plan

**Current Surface Use** 

Grazing

Wildlfe Habitat

New Road

Miles

Well Pad

Src Const Material

**Surface Formation** 

0.1

Width 145

Length 250

MDB

**Ancillary Facilities** 

#### Waste Management Plan Adequate?

#### **Environmental Parameters**

#### Affected Floodplains and/or Wetland Y

As proposed a wash cuts through the center of the well pad, diversion required.

#### Flora / Fauna

Grass: Curly gallata, cheat grass, bottle brush squirrel tail, Indian rice grass, Salina wild rye.

Forbs: Red steam filaree, halogeton, sunflower, apricot globe mallow, aster spp.

Shrubs: Wyoming sage, black grease wood, shadscale, spiny hop sage.

Trees: None

Other: prickly pear spp.

#### Soil Type and Characteristics

Mixture of Dakota sandstone outcrops and decomposed Mancos shale forming heavy gray clays mixed with gray sands.

#### Erosion Issues Y

Soils prone to wind erosion once disturbed. Access and well pad will require periodic watering to prevent them from forming large pockets of powder. Additional mitigation not recommended.

#### **Sedimentation Issues N**

#### Site Stability Issues N

#### Drainage Diverson Required Y

Drainage should be diverted to the north of the well pad at the culvert for the access road. Diversion point and discharge point shall be rip raped with 6" or greater rock.

#### Berm Required? N

#### Erosion Sedimentation Control Required? Y

Periodic application of fresh water to access road and well pad.

Paleo Survey Run? N Paleo Potental Observed? N Cultural Survey Run? N Cultural Resources? N

#### Reserve Pit

| Site-Specific Factors                   |                  | Site I      | Ranking |   |                   |
|---|------------------|-------------|---------|---|-------------------|
| Distance to Groundwater (feet)          | >200             |             | 0       |   |                   |
| Distance to Surface Water (feet)        | >1000            |             | 0       |   |                   |
| Dist. Nearest Municipal Well (ft)       | >5280            |             | 0       |   |                   |
| Distance to Other Wells (feet)          | >1320            |             | 0       |   |                   |
| Native Soil Type                        | Mod permeability |             | 10      |   |                   |
| Fluid Type                              | Fresh Water      |             | 5       |   |                   |
| <b>Drill Cuttings</b>                   | Normal Rock      |             | 0       |   |                   |
| <b>Annual Precipitation (inches)</b>    | 10 to 20         |             | 5       |   |                   |
| Affected Populations                    | <10              |             | 0       |   |                   |
| <b>Presence Nearby Utility Conduits</b> | Not Present      |             | 0       |   |                   |
|   |                  | Final Score | 20      | 1 | Sensitivity Level |

#### Characteristics / Requirements

Closed Loop Mud Required? N Liner Required? Y Liner Thickness 12 Pit Underlayment Required? N

#### **Other Observations / Comments**

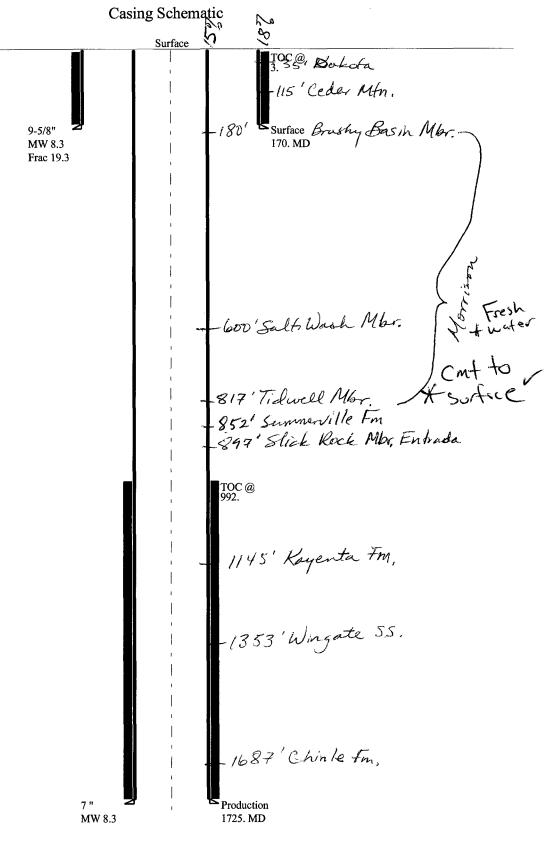
Proposed project is being permitted with SITLA as a Surface special use lease. As proposed project would accept E&P fluids from surrounding states and would be assessed additional payments.

Grand County has not been contacted regarding use of County Road 193, or an encroachment for the access road. Zoning and Land Use codes have not been addressed with Grand County.

Arch and Paleo inventories have not been completed.

Bart Kettle **Evaluator** 

6/16/2009 **Date / Time** 



Well name:

43019316230000 Westwater ST 4-2-19-25

Operator:

**Summit Operating, LLC** 

String type:

Surface

Project ID:

43-019-31623-0000

Location:

**Grand County** 

| Design parameters: |  |
|--------------------|--|
| Collapse           |  |

Mud weight:

8.330 ppg Design is based on evacuated pipe.

Minimum design factors: Collapse:

Design factor

**Environment:** 

H2S considered? Surface temperature: Bottom hole temperature: No 65 °F 67 °F

1.40 °F/100ft Temperature gradient: Minimum section length: 120 ft

Burst:

Design factor

1.00

1.50 (B)

1.125

Cement top:

3 ft

**Burst** 

Max anticipated surface

pressure: Internal gradient: Calculated BHP

150 psi 0.120 psi/ft 170 psi

No backup mud specified.

Tension:

Body yield:

8 Round STC: 1.80 (J) 1.80 (J) 8 Round LTC: 1.60 (J) **Buttress:** 1.50 (J) Premium:

Tension is based on air weight. Neutral point: 149 ft Non-directional string.

Re subsequent strings:

Next setting depth: Next mud weight:

1,725 ft 8.330 ppg Next setting BHP: 746 psi 19.250 ppg Fracture mud wt:

Fracture depth: Injection pressure: 170 ft 170 psi

| Run<br>Seq | Segment<br>Length<br>(ft) | Size<br>(in)                  | Nominal<br>Weight<br>(lbs/ft) | Grade                  | End<br>Finish              | True Vert<br>Depth<br>(ft) | Measured<br>Depth<br>(ft) | Drift<br>Diameter<br>(in)     | Internal<br>Capacity<br>(ft³) |
|------------|---------------------------|-------------------------------|-------------------------------|------------------------|----------------------------|----------------------------|---------------------------|-------------------------------|-------------------------------|
| 1          | 170                       | 9.625                         | 32.30                         | H-40                   | ST&C                       | 170                        | 170                       | 8.876                         | 75.1                          |
| Run<br>Seq | Collapse<br>Load<br>(psi) | Collapse<br>Strength<br>(psi) | Collapse<br>Design<br>Factor  | Burst<br>Load<br>(psi) | Burst<br>Strength<br>(psi) | Burst<br>Design<br>Factor  | Tension<br>Load<br>(Kips) | Tension<br>Strength<br>(Kips) | Tension<br>Design<br>Factor   |
| 1          | `.<br>74                  | 1370                          | 18.623                        | 170                    | 2270                       | 13.35                      | 5                         | 254                           | 46.26 J                       |

Prepared

Helen Sadik-Macdonald

Div of Oil, Gas & Mining by:

Phone: 810-538-5357

Date: July 15,2009 Salt Lake City, Utah

**ENGINEERING STIPULATIONS: NONE** 

Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Collapse is based on a vertical depth of 170 ft, a mud weight of 8.33 ppg. The casing is considered to be evacuated for collapse purposes. Burst strength is not adjusted for tension.

Well name:

43019316230000 Westwater ST 4-2-19-25

Operator:

**Summit Operating, LLC** 

String type:

Production

Project ID:

43-019-31623-0000

Location:

**Grand County** 

Design parameters:

<u>Collapse</u>

Mud weight: 8.330 ppg Design is based on evacuated pipe.

Minimum design factors:

1.125

1.00

1.50 (B)

Collapse:

Design factor

**Environment:** 

H2S considered? Surface temperature: No 65 °F

89 °F Bottom hole temperature: Temperature gradient: 1.40 °F/100ft

Minimum section length: 368 ft

**Burst:** 

Design factor

Cement top:

992 ft

**Burst** 

Max anticipated surface

pressure: 539 psi Internal gradient: 0.120 psi/ft Calculated BHP 746 psi

No backup mud specified.

**Tension:** 

Body yield:

8 Round STC: 1.80 (J) 1.80 (J) 8 Round LTC: Buttress: 1.60 (J) Premium: 1.50 (J)

Tension is based on air weight. Neutral point: 1.509 ft Non-directional string.

| Run        | Segment                   |                               | Nominal                      |                        | End                        | True Vert                 | Measured                  | Drift                         | Internal                    |  |
|------------|---------------------------|-------------------------------|------------------------------|------------------------|----------------------------|---------------------------|---------------------------|-------------------------------|-----------------------------|--|
| Seq        | Length<br>(ft)            | Size<br>(in)                  | Weight<br>(lbs/ft)           | Grade                  | Finish                     | Depth<br>(ft)             | Depth<br>(ft)             | Diameter<br>(in)              | Capacity<br>(ft³)           |  |
| 1          | 1725                      | 7                             | 23.00                        | J-55                   | LT&C                       | 1725                      | 1725                      | 6.25                          | 381.3                       |  |
| Run<br>Seq | Collapse<br>Load<br>(psi) | Collapse<br>Strength<br>(psi) | Collapse<br>Design<br>Factor | Burst<br>Load<br>(psi) | Burst<br>Strength<br>(psi) | Burst<br>Design<br>Factor | Tension<br>Load<br>(Kips) | Tension<br>Strength<br>(Kips) | Tension<br>Design<br>Factor |  |
| 1          | 746                       | 3270                          | 4.381                        | ``746                  | `4360                      | 5.84                      | 40                        | `313 <sup>′</sup>             | 7.89 J                      |  |

Prepared Helen Sadik-Macdonald

Div of Oil, Gas & Mining by:

Phone: 810-538-5357

Date: July 15,2009 Salt Lake City, Utah

**ENGINEERING STIPULATIONS: NONE** 

Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Collapse is based on a vertical depth of 1725 ft, a mud weight of 8.33 ppg The casing is considered to be evacuated for collapse purposes. Burst strength is not adjusted for tension.

### **BOPE REVIEW**

#### Summit Westwater ST 4-2-19-25 API 43-019-31623-0000

| INPUT                                    |                  |                    |                |    |
|--|------------------|--------------------|----------------|----|
| Well Name                                | Summit Westwater | ST 4-2-19-25 API 4 | 3-019-31623-00 | 00 |
|  | String 1         | String 2           |                |    |
| Casing Size (")                          | 8 5/8            | 7                  |                |    |
| Setting Depth (TVD)                      | 500              | 1725               |                |    |
| Previous Shoe Setting Depth (TVD)        | 0                | 500                |                |    |
| Max Mud Weight (ppg)                     | 8.33             | 8.33               | · ·            |    |
| BOPE Proposed (psi)                      | 500              | 2000               |                |    |
| Casing Internal Yield (psi)              | 2950             | 9240               |                |    |
| Operators Max Anticipated Pressure (psi) | 700              | 7.8                | ppg /          |    |

| Calculations                | String 1  | 8 5/8 | 10                |   |
|-----------------------------|---|-------|-------------------|---|
| Max BHP [psi]               | .052*Setting Depth*MW =                           | 217   |                   | <del></del>                                   |
|                             |   |       | <b>BOPE Adequ</b> | ate For Drilling And Setting Casing at Depth? |
| MASP (Gas) [psi]            | Max BHP-(0.12*Setting Depth) =                    | 157   | YES               | Air Drill                                     |
| MASP (Gas/Mud) [psi]        | Max BHP-(0.22*Setting Depth) =                    | 107   | YES               |   |
|                             |   |       | *Can Full Exp     | pected Pressure Be Held At Previous Shoe?     |
| Pressure At Previous Shoe   | Max BHP22*(Setting Depth - Previous Shoe Depth) = | 107   | € NO              | 0, l *  |
| Required Casing/BOPE Test   | Pressure  | 500   | psi /             |   |
| *Max Pressure Allowed @ Pro | evious Casing Shoe =                              | 0     | psi 🗸             | *Assumes 1psi/ft frac gradient                |

| Calculations               | String 2  | 7    |            |  |
|----------------------------|---|------|------------|--|
| Max BHP [psi]              | .052*Setting Depth*MW =                           | 747  | <b>'</b> [ | <del></del>                                      |
|                            |   |      | BOPE Ade   | equate For Drilling And Setting Casing at Depth? |
| MASP (Gas) [psi]           | Max BHP-(0.12*Setting Depth) =                    | 540  | YE         | S Air until mud required                         |
| MASP (Gas/Mud) [psi]       | Max BHP-(0.22*Setting Depth) =                    | 368  | YE         | S  |
|                            |   |      | *Can Full  | Expected Pressure Be Held At Previous Shoe?      |
| Pressure At Previous Shoe  | Max BHP22*(Setting Depth - Previous Shoe Depth) = | 478  | YE         | S  |
| Required Casing/BOPE Test  | Pressure  | 1725 | psi        |  |
| *Max Pressure Allowed @ Pr | evious Casing Shoe =                              | 500  | psi        | *Assumes 1psi/ft frac gradient                   |

**Online Services** 

**Agency List** 

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Utah Division of Water Rights | 1594 West North Temple Suite 220, P.O. Box 146300, Salt Lake City, Utah 84114-6300 | 801-538-7240 Natural Resources | Contact | Disclaimer | Privacy Policy | Accessibility Policy

#### Diana Mason - Fwd: Water injection well

From:

**Brad Hill** 

To:

Mason, Diana

Date:

8/3/2009 1:16 PM

**Subject:** Fwd: Water injection well

>>> Kurt Higgins 7/30/2009 5:07 PM >>> Brad, Special Use Lease Application No. 1630

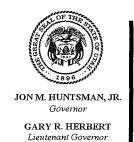
We have an application from Summit Operating, LLC for a Class 2 salt water disposal well located in Grand County described as T19S, R25E SLB&M Section 2. Proposed Westwater State #4-2-19-25.

Our archaeological staff has reviewed a survey report by GRI (U-09-GB-0358s) with a finding of no historic properties.

A paleontological survey was conducted June 6, 2009 Joshua Smith - BLM Colorado Permit C-60700. No vertebrate fossils were discovered during the survey. Abundant invertebrate fossils littered the surface. These invertebrate fossils were mostly disarticulated fragments from the underlying Dakota Formation. No paleonotlogical restrictions should be placed on development of the site. Should vertebrate fossils be discovered during construction a qualtifed paleontologist should be contacted to evaluate the discovery. (this provision will be included in our lease when executed) Kurt

Kurt M. Higgins Trust Lands Resource Specialist School and Institutional **Trust Lands Administration** 675 East 500 South, Suite 500 Salt Lake City, Utah 84102-2818

Phone: (801) 538-5100 Fax: (801) 355-0922 Email:: khiggins@utah.gov



#### DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA Division Director

August 3, 2009

Summit Operating, LLC 1441 Ute Blvd, Ste. 280 Park City, UT 84098

Re:

Westwater State 4-2-19-25 Well, 503' FNL, 502' FWL, NW NW, Sec. 2, T. 19 South,

R. 25 East, Grand County, Utah

#### Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann.§ 40-6-1 et seg., Utah Administrative Code R649-3-1 et seq., and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-019-31623.

Sincerely,

Gil Hunt

Associate Director

pab Enclosures

cc:

**Grand County Assessor** 

SITLA



| <b>Operator:</b>    |        | Summit Operating, LLC     |                   |  |
|---------------------|--------|---------------------------|-------------------|--|
| Well Name & Number_ |        | Westwater State 4-2-19-25 |                   |  |
| API Number:         |        | 43-019-31623              |                   |  |
| Lease:              |        | ML-49255                  |                   |  |
| Location: NW NW     | Sec. 2 | <b>T.</b> 19 South        | <b>R.</b> 25 East |  |

#### **Conditions of Approval**

#### 1. General

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

#### 2. Notification Requirements

The operator is required to notify the Division of Oil, Gas and Mining of the following action during drilling of this well:

- 24 hours prior to cementing or testing casing contact Dan Jarvis
- 24 hours prior to testing blowout prevention equipment contact Dan Jarvis
- 24 hours prior to spudding the well contact Carol Daniels
- Within 24 hours of any emergency changes made to the approved drilling program contact Dustin Doucet
- Prior to commencing operations to plug and abandon the well contact Dan Jarvis

The operator is required to get approval from the Division of Oil, Gas and Mining before performing any of the following actions during the drilling of this well:

- Plugging and abandonment or significant plug back of this well contact Dustin Doucet
- Any changes to the approved drilling plan contact Dustin Doucet

The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voice mail message if the person is not available to take the call):

• Dan Jarvis at:

(801) 538-5338 office

(801) 942-0871 home

• Carol Daniels at:

(801) 538-5284 office

• Dustin Doucet at:

(801) 538-5281 office

(801) 733-0983 home

#### 3. Reporting Requirements

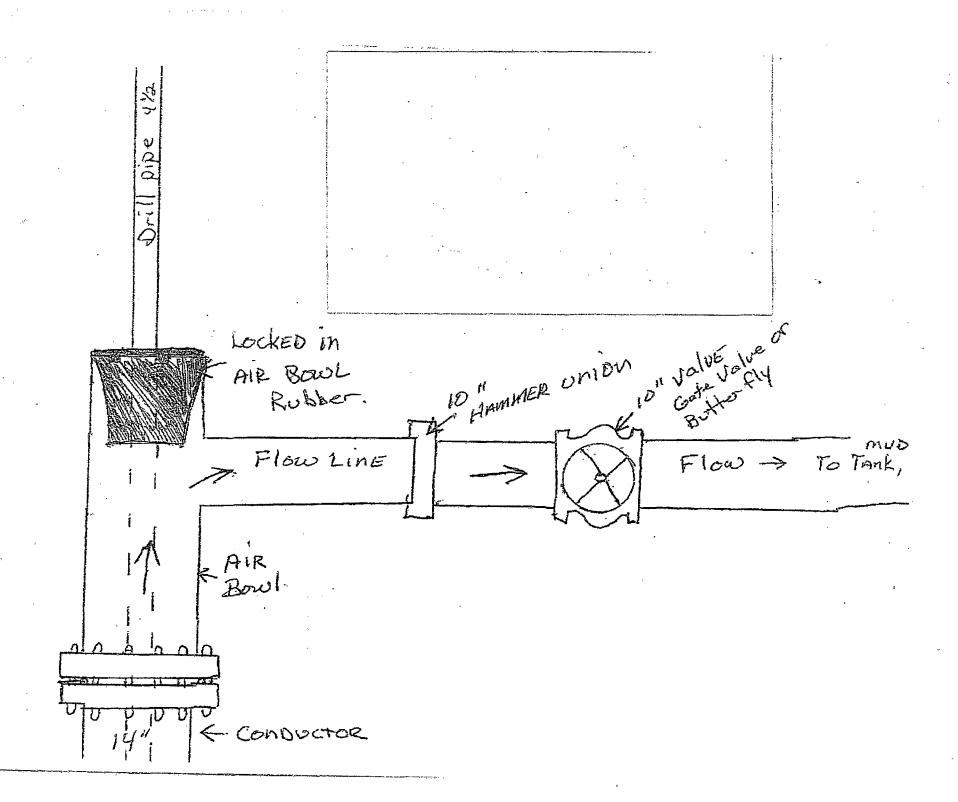
All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

Page 2 43-019-31623 August 3, 2009

- 4. Compliance with the State of Utah Antiquities Act forbids disturbance of archeological, historical, or paleontological remains. Should archeological, historical or paleontological remains be encountered during your operations, you are required to immediately suspend all operations and immediately inform the Trust Lands Administration and the Division of State History of the discovery of such remains.
- 5. Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis. (Copy Attached)
- 6. Cement volumes for the 9 5/8" and 7" casing strings shall be determined from actual hole diameters in order to place cement from the pipe setting depths back to the surface.

STATE OF UTAH

|  | DEPARTMENT OF NATURAL RESOU  |  |  |
|--|--|--|--|
|  | DIVISION OF OIL, GAS AND M   | INING  | 5. LEASE DESIGNATION AND SERIAL NUMBER:<br>Sitla 5319  |
| SUNDRY   | Y NOTICES AND REPORT   | S ON WELLS   | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME:  |
| Do not use this form for proposals to drill r<br>drill horizontal la | new wells, significantly deepen existing wells below ou<br>aterals. Use APPLICATION FOR PERMIT TO DRILL  | urrent bottom-hole depth, reenter plugged wells, or to<br>form for such proposals.   | 7. UNIT or CA AGREEMENT NAME:  |
| 1. TYPE OF WELL OIL WELL   |  | Disposal well  | 8. WELL NAME and NUMBER:   |
| 2. NAME OF OPERATOR:   |  | .,   | Westwater State 4-2-19-25  9. API NUMBER:  |
| Summit Operating LLC  3. ADDRESS OF OPERATOR:                        |  |  | 4301931623   |
|  | Y Park City STATE Ut ZIF   | ,84098 (432) 940-9001  | 10. FIELD AND POOL, OR WILDCAT:  |
| 4. LOCATION OF WELL  | and the state of the second of |  |  |
| FOOTAGES AT SURFACE:   |  |  | соимту: Grand  |
| OTR/OTR, SECTION, TOWNSHIP, RAN                                      | ige, meridian: NWNW 2 19S 2  | 25 <b>E</b>  | STATE:<br>UTAH   |
| 11. CHECK APPI   | ROPRIATE BOXES TO INDICAT  | TE NATURE OF NOTICE, REPO  | RT, OR OTHER DATA  |
| TYPE OF SUBMISSION   |  | TYPE OF ACTION   |  |
| NOTICE OF INTENT   | ACIDIZE  | DEEPEN   | REPERFORATE CURRENT FORMATION  |
| (Submit in Duplicate)  | ALTER CASING   | FRACTURE TREAT   | SIDETRACK TO REPAIR WELL   |
| Approximate date work will start:                                    | CASING REPAIR  | MEW CONSTRUCTION   | TEMPORARILY ABANDON  |
|  | CHANGE TO PREVIOUS PLANS   | OPERATOR CHANGE  | TUBING REPAIR  |
|  | CHANGE TUBING  | PLUG AND ABANDON   | VENT OR FLARE  |
| SUBSEQUENT REPORT (Submit Original Form Only)                        | CHANGE WELL NAME   | PLUG BACK  | WATER DISPOSAL   |
| Date of work completion:   | CHANGE WELL STATUS   | PRODUCTION (START/RESUME)  | WATER SHUT-OFF   |
|  | COMMINGLE PRODUCING FORMATIONS   | RECLAMATION OF WELL SITE   | OTHER:   |
|  | CONVERT WELL TYPE  | RECOMPLETE - DIFFERENT FORMATION   |  |
|  |  | pertinent details including dates, depths, volum<br>head to eliminate the BOP and us |  |
|  |  |  | ·  |
|  |  |  |  |
|  | •  |  |  |
|  |  | CC   | PY SENT TO OPERATOR  |
|  |  | Dr.  | 1.9.2009   |
|  |  | . Ini  | tials: KS  |
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| Tour   | d Knydson  | 10.  | •  |
| NAME (PLEASE PRINT)  | 7 / / / / / / / / / / / / / / / / / / /  | TITLE DIPERSTUN  | 2  |
| SIGNATURE  | Xul.   | DATE Sept 3 -  | - 09   |
| (This space for State use only)                                      | PROVED BY THE ST   | ATE OF   | RECEIVED   |
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| DA.  | TEN 9/3/09   | · ·  | SEP U D ZOOS   |
| (5/2000) BY:   | 1 18/1////   | ucions on Reverse Side)  | DIV. OF OIL, GAS & MINING  |



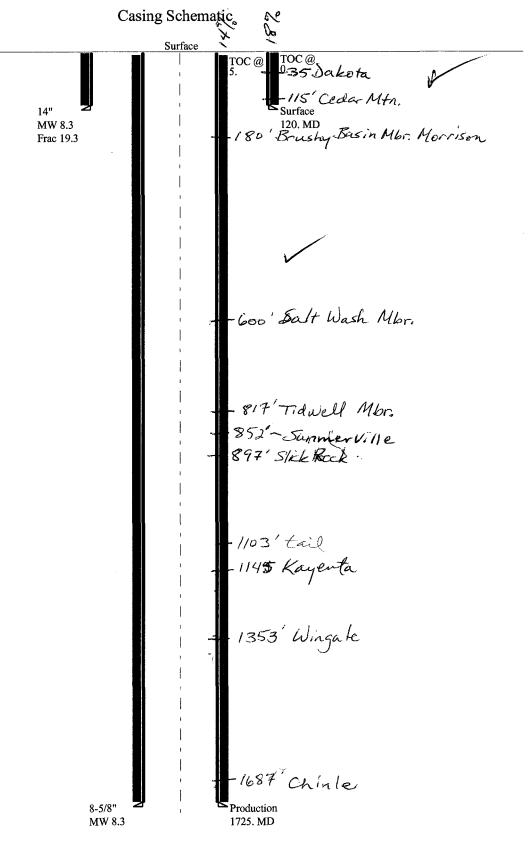
| DEPARTMENT OF MATURAL PROCURORS  | FORIM 9   |
|--|---|
| DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING  | 5. LEASE DESIGNATION AND SERIAL NUMBER:<br>SITLA 5319 |
| SUNDRY NOTICES AND REPORTS ON WELLS  | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME:                 |
| Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals. | 7. UNIT or CA AGREEMENT NAME:                         |
| 1. TYPE OF WELL OIL WELL GAS WELL OTHER Disposal Well  | 8. WELL NAME and NUMBER: Westwater State 4-2-19-25    |
| 2. NAME OF OPERATOR: Summit Operating  | 9. API NUMBER:<br>4301931623                          |
| 3. ADDRESS OF OPERATOR: 1441 Ute Blvd Suite 280 CITY Park City STATE Ut ZIP 84098 PHONE NUMBER: (435) 940-9001   | 10. FIELD AND POOL, OR WILDCAT:                       |
| 4. LOCATION OF WELL FOOTAGES AT SURFACE:   | COUNTY: Grand County                                  |
| QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NWNW 2 19S 25E  | STATE: UTAH   |
| 11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPO   | RT, OR OTHER DATA                                     |
| TYPE OF SUBMISSION TYPE OF ACTION  |   |
| NOTICE OF INTENT   | REPERFORATE CURRENT FORMATION                         |
| (Submit in Duplicate) ALTER CASING FRACTURE TREAT  | SIDETRACK TO REPAIR WELL                              |
| Approximate date work will start: CASING REPAIR NEW CONSTRUCTION   | TEMPORARILY ABANDON                                   |
| CHANGE TO PREVIOUS PLANS OPERATOR CHANGE   | TUBING REPAIR   |
| CHANGE TUBING PLUG AND ABANDON   | VENT OR FLARE   |
| SUBSEQUENT REPORT CHANGE WELL NAME PLUG BACK   | WATER DISPOSAL  |
| (Submit Original Form Only)  | <u> </u>  |
| Date of work completion:  CHANGE WELL STATUS  PRODUCTION (START/RESUME)  | WATER SHUT-OFF  |
| COMMINGLE PRODUCING FORMATIONS RECLAMATION OF WELL SITE  | OTHER:  |
| CONVERT WELL TYPE RECOMPLETE - DIFFERENT FORMATION   |   |
| 12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volume  | es, etc.  |
| Summit requests the following change on the proposed casing and cementing program:   |   |
| Size of hole casing size, grade, weight set depth Cement Type, quantity  | , yield, and slurry weight                            |
|  | loride, 1/4lb per sack flow sill<br>cu ft/sk 15.8 ppg |
| 121/4" 8,5/8" J55 24# 1,725 Hi fill 186 sacks, 3.82 c<br>Class G 2% Calcium (<br>366 sacks 1.15 cu ft/s  | Chloride, 1/4lb per sac flow sill                     |
|  | COPY SENT TO OPERATOR                                 |
|  | Date: 9:3.2009  |
| ţ  | Initials: KS  |
| NAME (PLEASE PRINT) Day of Kandson TITLE Operat  | 1UA S   |
| SIGNATURE DATE 11-2-09   |   |
| <u> </u>   |   |

(This space for State use only)

APPROVED BY THE STATE
OF UTAH DIVISION OF
OIL, GAS, AND MINING
DATE

(5/2000)

### 43019316230000 Westwater ST 4-2-19-25



Well name:

43019316230000 Westwater ST 4-2-19-25

Operator:

Location:

**Summit Operating, LLC** 

String type:

Production

**Grand County** 

Project ID:

43-019-31623-0000

Design parameters: Collapse

Mud weight:

8.330 ppg Design is based on evacuated pipe.

Minimum design factors:

Collapse:

Design factor

**Environment:** 

H2S considered? Surface temperature: Bottom hole temperature:

No 65 °F 89 °F

1.40 °F/100ft Temperature gradient: Minimum section length: 368 ft

1.125

**Burst:** 

Design factor 1.00 Cement top:

5 ft

**Burst** 

Max anticipated surface

pressure: 539 psi Internal gradient: 0.120 psi/ft Calculated BHP 746 psi

No backup mud specified.

Tension:

8 Round STC: 1.80 (J) 8 Round LTC: 1.80 (J) 1.60 (J) **Buttress:** Premium: 1.50 (J) Body yield: 1.50 (B)

Tension is based on air weight. 1.509 ft Neutral point:

Non-directional string.

| Run<br>Seq | Segment<br>Length<br>(ft) | Size<br>(in)                  | Nominal<br>Weight<br>(lbs/ft) | Grade                  | End<br>Finish              | True Vert<br>Depth<br>(ft) | Measured<br>Depth<br>(ft) | Drift<br>Diameter<br>(in)     | Internal<br>Capacity<br>(ft³) |
|------------|---------------------------|-------------------------------|-------------------------------|------------------------|----------------------------|----------------------------|---------------------------|-------------------------------|-------------------------------|
| 1          | 1725                      | 8.625                         | 24.00                         | J-55                   | ST&C                       | 1725                       | 1725                      | 7.972                         | 616.8                         |
| Run<br>Seq | Collapse<br>Load<br>(psi) | Collapse<br>Strength<br>(psi) | Collapse<br>Design<br>Factor  | Burst<br>Load<br>(psi) | Burst<br>Strength<br>(psi) | Burst<br>Design<br>Factor  | Tension<br>Load<br>(Kips) | Tension<br>Strength<br>(Kips) | Tension<br>Design<br>Factor   |
| 1          |                           | 1370                          | 1.835                         |                        | ~2950                      | 3.95                       | 41                        | 244                           | 5.89 J                        |

Prepared Helen Sadik-Macdonald

Div of Oil, Gas & Mining by:

Phone: 810-538-5357

Date: September 3,2009 Salt Lake City, Utah

**ENGINEERING STIPULATIONS: NONE** 

Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Collapse is based on a vertical depth of 1725 ft, a mud weight of 8.33 ppg. The casing is considered to be evacuated for collapse purposes. Burst strength is not adjusted for tension.

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES

|  | cМ |  |
|--|----|--|
|  |    |  |

| DIVISION OF OIL, GAS AND MINING  | 5. LEASE DESIGNATION AND SERIAL NUMBER: ML-49255  |
|--|---|
| SUNDRY NOTICES AND REPORTS ON WELLS  | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME:<br>N/A  |
| Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals. | 7. UNIT OF CA AGREEMENT NAME:  N/A  |
| 1. TYPE OF WELL OIL WELL GAS WELL OTHER Injection  | 8. WELL NAME and NUMBER: Westwater State 4-2-19-25  |
| 2. NAME OF OPERATOR: Summit Operating, LLC   | 9. API NUMBER:<br>4301931623  |
| 3. ADDRESS OF OPERATOR:  1245 Brickyard Road # 210 CITY Salt Lake City  STATE Ut ZIP 84106 PHONE NUMBER:  (435) 940-9001   | 10. FIELD AND POOL, OR WILDCAT:  Greater Cisco  |
| 4. LOCATION OF WELL FOOTAGES AT SURFACE: 503' FNL, 502' FWL  | соинту: Grand   |
| QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NWNW 2 19S 25E S  | STATE: UTAH   |
| 11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPO   | RT, OR OTHER DATA   |
| TYPE OF SUBMISSION    NOTICE OF INTENT (Submit in Duplicate)   | REPERFORATE CURRENT FORMATION  SIDETRACK TO REPAIR WELL  TEMPORARILY ABANDON  TUBING REPAIR  VENT OR FLARE  WATER DISPOSAL  WATER SHUT-OFF  OTHER: Extension of APD |
| DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volume Summit hereby requests an extension of the above described APD.  | es, etc.  COPY SENT TO OPERATOR   |
| Approved by the Utah Division of Oil, Gas and Mining   | Date: 10 11 2010  |
| Date: 10 - 06 - 10  By:  |   |
| NAME (PLEASE PRINT) David Knudson for Summit Operating, LLC TITLE Land   |   |
| SIGNATURE  |   |
| This space for State use only)   | RECEIVED  |

DIV. OF OIL, GAS & MINING

OCT 0 4 2010



# Application for Permit to Drill Request for Permit Extension Validation (this form should accompany the Sundry Notice requesting permit extension)

| API: 43-019-31623 Well Name: Westwater State 4-2-19-25 Location: NWNW sec 2, T19S, R25E Company Permit Issued to: Summit Operating, LLC Date Original Permit Issued: 8/3/2009   |
|---|
| The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. |
| Following is a checklist of some items related to the application, which should be verified.  |
| If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes □ No ☑  |
| Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes□ No ☑   |
| Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes□No☑   |
| Have there been any changes to the access route including ownership, or right-of-way, which could affect the proposed location? Yes⊡No ☑  |
| Has the approved source of water for drilling changed? Yes□No☑  |
| Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes□No☑   |
| Is bonding still in place, which covers this proposed well? Yes ☑ No ☐  |
| Signature Oct 6, 2010 Date  |
| Title: Operations   |
| Representing: Summit Operating, LLC   |



## State of Utah

#### DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA

Division Director

October 3, 2011

Summit Operating, LLC. 1245 Brickyard Road #210 Salt Lake City, UT 84106

Re:

APD Rescinded – Westwater State 4-2-19-25, Sec. 2, T.19S, R.25E

Grand County, Utah API No. 43-019-31623

#### Ladies and Gentlemen:

The Application for Permit to Drill (APD) for the subject well was approved by the Division of Oil, Gas and Mining (Division) on August 3, 2009. On October 6, 2010 the Division granted a one-year APD extension. No drilling activity at this location has been reported to the division. Therefore, approval to drill the well is hereby rescinded, effective October 3, 2011.

A new APD must be filed with this office for approval prior to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely,

**Environmental Scientist** 

Well File cc:

SITLA, Ed Bonner

